ISSN: 3049-2521 (O)

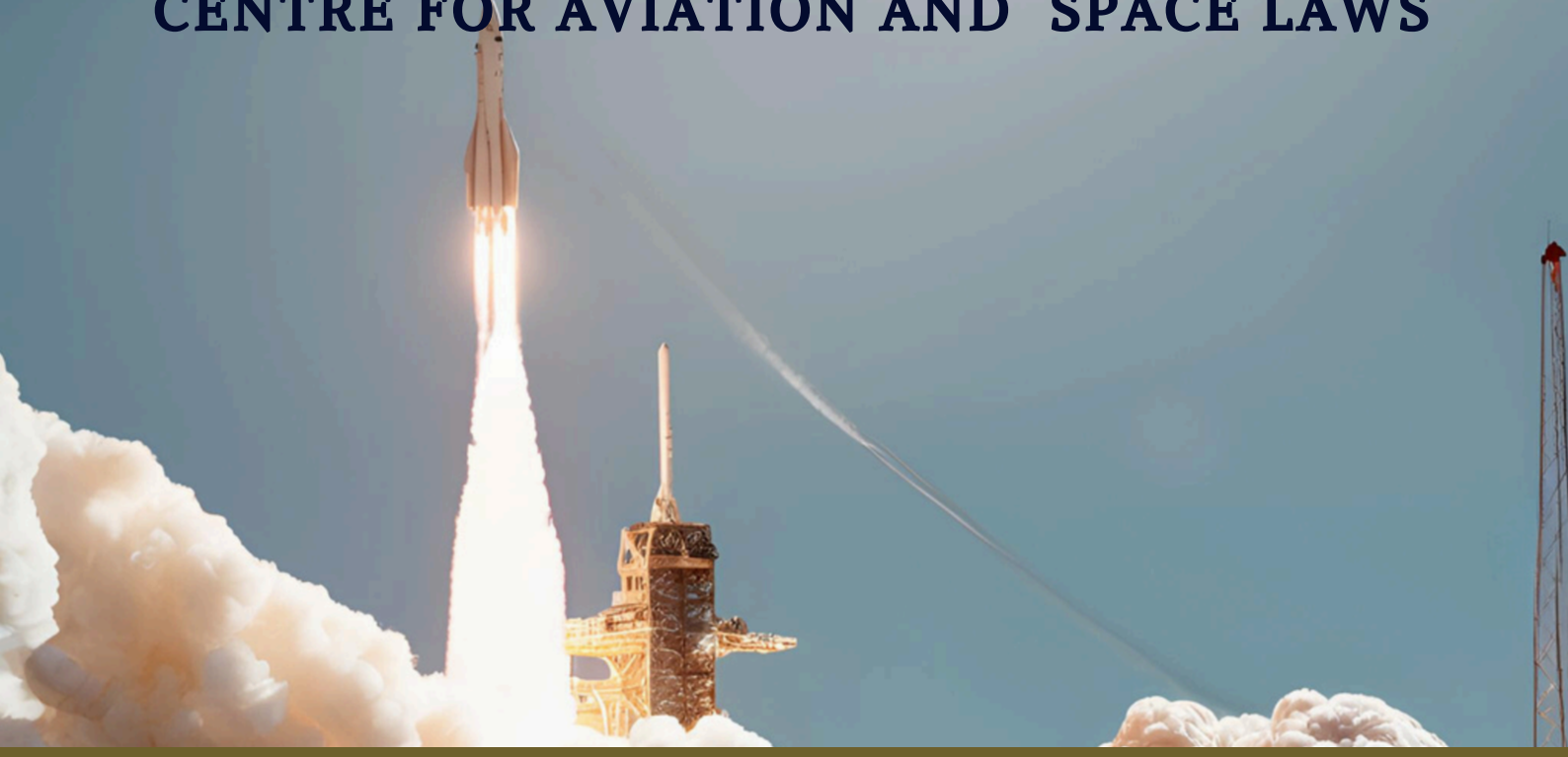
Volume 3 Issue I

2023

LEX AD COELUM

A Flagship Journal of

CENTRE FOR AVIATION AND SPACE LAWS



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SPY BALLOON AND INTERNATIONAL LAW: HAS BOTH CHINA AND THE U.S. VIOLATED INTERNATIONAL LAW?

Dr. Atul Alexander[*]

Keywords: ARSIWA – Chicago Convention – Countermeasure – Force Majeure – UN Charter

Recently the United States (U.S) shot down the Chinese High-Altitude Balloon (HAB) in the sovereign airspace of the U.S. According to the U.S. Secretary of Defense Llyod Austin, the HAB was deployed to carry out surveillance activities in the continental U.S. The incident forced the Secretary of State Anthony Blinken to comment how China had breached the fundamental principles of international law and also postponed his diplomatic visit to China.

In the aftermath of the incident, several scholars argued how China violated international law; this post explores how both U.S and China breached international law obligations. The Chinese claim that the balloon was used for civilian purposes for undertaking scientific research. Moreover, it contended that it could not prevent the balloon from drifting because the westerly wind movement influenced the balloon's scheduled route. As China puts it, the infringement was a case of *force majeure*. It is without a doubt that the incursion of the balloon tested the boundaries of international law.

Force Majeure Exception

The initial Chinese statement claims that as the balloon was in distress, it was entitled to enter the U.S. sovereign airspace. Since the balloon was used for civilian purpose (as per Chinese reports) it does not enjoy sovereign immunity. In terms of distress, Art. 23(1) of Articles on Responsibility of States for Internationally Wrongful Acts states (ARSIWA) states in substance that- the wrongfulness of the act committed by a State is precluded, if the act is due to *force majeure*, that is, the occurrence was because of irresistible force or unforeseen event, which is beyond the control of the State. This is a scenario wherein the State is compelled to act in a way inconsistent with the international law obligation incumbent upon it. To invoke *force majeure,* there are three fundamental requirements; (a) the act must be brought because of the irresistible force of nature, (b) it has to be beyond the control of the State, and (c) it

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becomes materially impossible in the circumstances to perform the obligation. Assuming that the balloon drifted because of the westerly winds, it certainly fits into the first requirement. It can be said that the movement of the balloon is beyond the control of the Chinese authorities, and hence, it became materially impossible for China to fulfil the international law obligation.

The U.S. could assert that China was in breach of the principles under the general international lawand the Convention on International Civil Aviation 1944 (Chicago Convention). State practice reveals that *force majeure* applies in situations of actual impossibility and not difficulty of performance plea. The International Law Commission (ILC) commentary provided examples of distress to include cases of aircraft entering the airspace of other states because of loss of control or weather. The exception to the said rule is when the State invoking the exception has actively contributed to the material impossibility and thereby accepted the risk of the occurrence of *force majeure*. As Michel Bourbonniere and Louis Haeck point out, "The overflight of sovereign territory by a state aircraft can be justified by reasons of distress or force majeure as an exception to the principle [that state aircraft cannot flyover the territory of another State…without authorisation." However, according to Article 8of the Chicago Convention, pilotless aircraft are required to get special authorisation from the contracting State over which the aircraft is flown, this is also espoused by the U.S. statute wherein the federal government maintains exclusive sovereignty over U.S. airspace, and foreign aircraft require permission to navigate.

One of the annexing agreements under the Chicago Convention is the International Air Services Transit Agreement, the agreement provides for multilateral exchanges with regard to the first two freedoms of the air with regard to schedule air services. The Convention and the annexing agreement meant that each State recognized the other's right to fly through national air space. Although China has denounced the agreement on 11 December 1946, through its note of 3 June 1997, the Chinese Ambassador, stated that the agreement 'applies to Hong Kong at present, will continue to apply to the Hong Kong Special Administrative Region with effect from July 1997.' Also, by the note dated 8 December 1999, it applied to the Macau region. Moreover, the freedoms mentioned in the Transit Agreement are with respect to scheduled air services. Accordingly, the applicability of rights under the Transit Agreement in this case becomes questionable.

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The Legality of United States Actions

As per Article 1 of the Chicago Convention, every State has complete and exclusive sovereignty over airspace above its territory. Annex VII of the said convention defines an aircraft as "any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface." The definition under the Chicago Convention's Annex VII includes object lighter or heavier than air and powered or unpowered balloons. Further, paragraph 2.2 of Appendix 5(Annex II) of the Chicago Convention states how an unmanned free balloon used exclusively for meteorological purposes shall not be operated across the territory of another State without appropriate authorisation. Further, paragraph 2.3 provides that authorisation is to be taken prior to launching the balloon if there is a reasonable expectation…that the balloon may drift over the airspace of another State. It is evident from the existing fact that China didn't get prior authorisation from the U.S.

After the downing of the KAL 007 on 1 September 1983, members of the ICAO assembly adopted Art 3 *bis* to the Chicago Convention, wherein, if there are reasonable grounds to conclude that an aircraft is being used for any purpose inconsistent with the purpose of the Convention, instructions are to be given to the aircraft to end the violation. In doing so, a State may resort to appropriate means according to relevant rules of international law. In essence, Article 3 *bis* precludes States from using weapons against intruding aircraft. It is widely agreed that Art 3 *bis* is a codification of customary international law. Also, the point to be noted is that Art. 3 *bis* does not intend to modify the rights and obligations of the State under the UN Charter. Therefore, the U.S could attempt to make a valid justification for the use of force under Art. 51 of the UN Charter.

Article 51 permits States to use force for self-defence in case of an armed attack against it. In the Oil Platforms Case (2003) between Iran and U.S, the International Court of Justice (ICJ) articulated the jurisprudence on 'armed attack'; accordingly, it expressed, in exercise of the right of individual self-defence, States have to prove that attack against it is of such a nature to be qualified as an 'armed attack' within the meaning of Art. 51. Literal reading of Art. 51 would indicate that an armed attack has to be essentially kinetic in nature. Hence, self-defence taken devoid of a previous act of an armed attack (in a kinetic sense) is untenable.

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Further, to trigger Article. 51, the requirement of proportionality, necessity and immediacy are to be fulfilled. Even if the Chinese Balloon entered U.S. airspace, it did not use force, a prerequisite to trigger Article 51 and to press into application the proportionality and necessity threshold. The ICJ has shed light on the nature of self-defence in the NicaraguaCase (1986); in para 74, the ICJ observed, 'whether the response to the [armed] attack is lawful depends on observance of the criteria of the necessity and the proportionality of the measures taken in self-defence'.

The other reasoning which the U.S may place is anticipatory self-defence, which came into the limelight after the famous Caroline Incident (1837). If the U.S asserts anticipatory self-defence, the defence is shaky because as per Pentagon's admission, the HAB was "traveling at an altitude well above commercial air traffic and [did] not present a military or physical threat to people on the ground." If the U.S claims are unjustifiable, this may amount to a blatant breach of a *jus cogens* norm of prohibition of the use of force; wherein the U.S could incur state responsibility under international law. At most, this incident could be a case of espionage at par with States deploying submarines conducting spying in the territorial waters. As I have argued previously, espionage per se doesn't violate international law obligations. In a diplomatic sense, it is implied that States spy on one other. The absence of legal justification under international law can characterise the U.S action as a countermeasure. Countermeasures are justified under certain circumstances, if carried out to make other States cease the violation of international law. However, for invoking countermeasures, there are a plethora of strict requirements like a prior internationally wrongful act of the responsible State against the injured State, notification and offer to negotiate with the responsible State etc. Therefore, the purpose of countermeasure is restoration and not retributive. But the U.S. is yet to make any unambiguous statement on countermeasure.

Notes & References:

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SPACE DEBRIS AS AN ENVIRONMENTAL POLLUTANT: CONCEPTUALISING RAMIFICATIONS AND SOLUTIONS – PART I

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Keywords: Cosmos 2251 – Iridium 33 – Liability Convention – Space station – Stray satellites

Part I: Ramifications of Space Debris as an Environmental Pollutant[1]

Introduction

From the failed launch of the Thor-Ablestar that got dismantled over Cuba and ended up butchering the famous cow "Ruhina" to the relatively recent crash of a Chinese March 3B rocket Booster which crashed into a village, spreading toxic fumes and destroying homes, accidents caused by falling space debris are in abundance. These unfortunate events are not rare occurrences. In May 2020, debris from a Chinese Rocket's failed re-entry fell into villages on the Ivory Coast. More recently, in July 2022, debris crashed into the Indian Ocean. Though the exact repercussions of the crash are yet to be quantified, subsequent pieces of said debris were found dangerously close to villages in Borneo. With over 630 explosions, collisions, and other unplanned events since 1957, more than 100 million objects have been categorised as space debris that can cause serious unforeseen damage.

The UN Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space has set the first internationally accepted definition of space debris as "all man-made objects, including fragments and elements thereof, in Earth orbit or re-entering the atmosphere, that are non-functional". Johnson argues that the definition also encompasses leaking fuel and coolant droplets since they can be extremely dangerous at such high speeds. We face a plethora of legal and social problems when it comes to space debris management. The lack of a universally agreed upon definition of environmental pollutant makes it difficult to classify which forms of space debris could be classified as a pollutant. The fact that we have not yet formed cohesive jurisprudence on debris management adds to the problem. As of now, a majority of the debris management task is left upon the Earth's atmosphere, which naturally pulls orbiting debris downward and incinerates it into

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the thicker lower atmosphere. However, increasing carbon dioxide levels are lowering the density of the upper atmosphere, which may diminish this effect, creating an increased need for human intervention in space debris management.

Ramifications of Space Debris on the environment

With an increasing quest for scientific breakthroughs, nations across the globe are constantly competing. Space research is one such area that attracts both developed and developing countries. Unlike earlier times, space research is being commercialised, and according to the Global Risks Report published in 2022, this has created crowding and competition in space. For comparison, one could understand the Low Earth Orbit ('LEO') as a market space and the satellites (communication, expeditionary or otherwise) as the product choices available for consumer consumption. Here, consumer consumption could be equated with the benefits satellites provide, such as communication, television and broadcasting, and weather prediction. The more satellites a country launches, its control over the space market grows stronger. With an increasing number of developing countries launching satellites successfully, developed countries have also resorted to competitive multi-satellite launches. With more than one satellite being launched at one time, the LEO is now heavily crowded. Many of these satellites fail to return to the Earth's surface and stray in the LEO or the orbit and enter the non-LEO zones. In both cases, satellites are contaminants in space. The United States Space Surveillance Network has tracked more than 15,000 pieces of space debris measuring larger than 10 cm and 20,00,000 pieces measuring between 1 and 10 cm. As of 2021, they estimate a potential presence of a million debris pieces lesser than 1 cm in size. The Department of Defence's Space Surveillance Network has tracked 27,000 particles of "spacejunk" till 2022.

A 1 cm object can penetrate the pressurised crew module of a space station, kill the crew and cause the station to break up, pierce the window of a craft, and disable or destroy a satellite. In contrast, 0.5 mm fragment can puncture a suit and kill an astronaut. Given the threats such space debris particles pose, it is important to determine the scope and extent of the launching state's liability. This is particularly important when such objects contribute to pollution in both space and Earth's atmosphere. For instance, when the Russian navigation satellite Cosmos1934 collided with debris from another Russian rocket body, both

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objects belonged to the same state. The impact of the collision was such that it created thousands of new debris pieces in space. These debris pieces pose a potential collision threat to future objects launched by Russia as well as other countries. In this case, since the satellite that was destroyed and the object that caused its destruction belonged to the same country, the question of liability and compensation was in the backseat. In 2009, a US-owned satellite Iridium-33 collided with a defunct Russian military satellite, Cosmos 2251. This collision resulted in hundreds of pieces of larger, traceable debris and is considered the worst satellite breakup, the effects of which continue to be felt. Situations like this demand determination of liability of the launching state for harm sustained by space objects of other states. Internationally, this is governed by the Convention on International Liability for Damage Caused by Space Objects 1971 (Liability Convention).

Article II of the Liability Convention recognises an absolute liability of the launching state to pay compensation for the "damage caused by its space object on the surface of the earth or to aircraft flight." However, the Convention is silent on the liability of the launching state when it's space object damage another *natural* space object, with resultant debris particles causing potential threats in both outer space and Earth's atmosphere. The authors suggest that besides requiring one state to compensate the other, there should also be a determination of state responsibility and consequential liability for creating pollution. Closely investigating the reasons for such collisions would be helpful in concluding the proportion of each state's contribution and resultant liability to clean up such pollution.

Article III of the Liability Convention stipulates liability determination on the basis of fault when the damage is caused by space object of one launching state to a space object of another launching State elsewhere than on the surface of the Earth or, to persons or property on board such a space object. However, it is important to note that the Convention does not clarify whether space debris pollution would be considered a *fault* in space for the purpose of liability determination. Moreover, the liability for damage is confined to space objects and person or property of other States. The consequential damage to outer space environment due to collision of space objects is not addressed under this provision.

In the absence of liability for abandoning the satellites after they become defunct, the number of stray satellites is increasing. This leads to an increased risk of their

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collision with active satellites, other stray satellites as well as natural space objects. Such collisions contribute not only to pollution in terms of emissions but also in terms of light pollution. Intense light is emitted by such collisions that would not have happened but for the stray satellites. This causes hindrances for scientists who are observing space from the Earth.

Besides being a space contaminant, a stray satellite also acts as a creator of more such contaminants. Stray satellites without any way to steer onto a steadier orbital path have an increased chance of careening into other orbiting objects, be it another satellite or a piece of debris. This catalyses the cycle of debris generation. Furthermore, the remains of such objects, after a collision, might get accumulated in the lower space sphere, with the possibility of their escape into the upper atmosphere, resulting in reduced capacity of the upper atmosphere to absorb the harmful solar radiations. From a commercial perspective, such continued competitive launching by countries would result in a potential monopoly on the LEO, which would severely hamper the continuation of scientific research for the sole purpose of benefit of humankind.

In summary, even though space debris has not been recognized as an environmental pollutant, its interaction with other objects could potentially lead to pollution in outer space as well as on the Earth surface. Therefore, it is important to have a legal regulation in place in this regard. In the next part, the authors will critically analyses the existing legal frameworks on outer space while presenting recommendations to reduce the impact of space debris pollution.

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[1] This is a two-part blog. In the first part, the authors discuss the ramifications of space debris as an environmental pollutant. The second part discusses the international legal framework with recommendations.

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SPACE DEBRIS AS AN ENVIRONMENTAL POLLUTANT: CONCEPTUALISING RAMIFICATIONS AND SOLUTIONS – PART II

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Keywords: Common heritage – IADC – ILA Draft Convention on Space Debris – Nuclear Power Source Principles – Partial Nuclear Test Ban Treaty

Part II: Discussing the Inadequacy of the Existing Legal Framework to Address Space Debris as an Environmental Pollutant[1]

Position of International Law on Space Debris Pollution

There is a major incoherence in international scholarship regarding what the term 'Environment' means. Different disciplines point towards different interpretations, thus lacking a cohesive definition. Various treaties, for example the Partial Test Ban Treaty, implicitly suggest a distinction between the natural environment and space. In scholarly writings on the meaning and scope of the term space, space has been seen as separate from the environment, and hence, it is not subject to environmental laws. This is due to a variety of reasons *inter alia* that space has a very different habitat as compared to that of the Earth. The interaction of humans with space functions very differently from their interactions with the Earth. Hence, the 'natural environment' is considered from the ground to the lower atmosphere. Similarly, the law has made a very clear distinction between the natural environment that we live in and outer space owing to political, scientific and reasons of sheer convenience.

There are a variety of international treaties and principles, as well as organisations working endlessly to protect the environment from the repercussions of outer space activity. The Partial Nuclear Test Ban Treaty of 1963 is a very prominent and successful piece of international law. It essentially prohibits nuclear weapons tests "or any other nuclear explosion" in outer space. In effect, the treaty helps prevent nuclear contamination of the environment. Having been signed by all the countries capable of harnessing nuclear power, the treaty has set up a robust system of international monitoring stations. It, however, falls short in achieving its intended effect as *inter alia*:

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1. it only prohibits explosion and not the deployment/carriage/uses of nuclear matter such as propulsion and transportation and;

2. it does not address the nuclear matter already present in space and applies only to ones being launched after the treaty was signed.

The Liability Convention, as discussed in Part I, is responsible for assigning liability to a party for the repercussions of its actions related to the use of outer space. Article XXI of the Liability Convention is important when it comes to State assistance in events of damage caused by a space object, where such damage poses a large-scale danger to human life or interferes seriously with the living conditions of the population or interferes with the functioning of vital centres. However, it is important to note that the Convention does not fix any liability on the State; the State assistance being reduced to a non-mandatory clause. The Convention also does not address environmental degradation and related effects in the strict sense as a large-scale danger to human life is a relative phrase, which may be subject to varied interpretations. Another inadequacy of the Convention is that it only mentions damage caused by "space objects", which might end up eliminating many types of debris from its ambit.

The Principles Relevant to the Use of Nuclear Power Sources in Outer Space (Nuclear Power Source Principles) is a set of principles adopted by the UN General assembly in 1993, which reflect the common practices for the use of nuclear power sources in outer space. It calls for various design, regulatory, and safety mechanisms and recommends for their adoption to protect individuals, populations, and the biosphere against radiological hazards. However, Principle 3.1.a of the Nuclear Power Source Principles clarifies that they are just a set of recommendatory principles that may be followed and have no binding value.

Some organisations have also attempted to draft principles which directly or indirectly deal with space debris management. Importantly, the International Law Association (ILA) formed the ILA Draft Convention on Space Debris, which was adopted in 1994. It sets out to bridge the deficiencies of the Liability Convention. It applies to "space debris which causes or is likely to cause direct or indirect, instant or delayed damage to the environment, or to persons or objects". This Draft Convention adopts a broader understanding of the damage to include indirect damage, unlike the Liability Convention, which only identifies direct damage.

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National space organisations, like the Federal Aviation Administration, British National Space Centre and Italian Space Agency, are working endlessly to create pragmatic yet effective methods to prevent debris mitigation and management. This is done through their assessment and licensing standards which incorporate quantitative and qualitative analysis. They aim at formulating guidelines for testing the amount of combustible material on board and identifying particular facets of an asset, as well as the launch processes and other stages that have the potential for generating debris. For instance, Inter-Agency Space Debris Coordination Committee(IADC) focuses on codifying principles of space debris mitigation that are binding on all IADC member agencies such as NASA, ESA, ISRO etc. The IADC is essentially very effective in its approach, even though it is not binding since it is just an intergovernmental forum. Still, due to its close-knit functioning, the member States' organisations do end up following it. Making such principles binding would further empower such bodies to impose sanctions for non-compliance.

Thus, two major gaps exist in the existing legal framework to address space debris pollution. First, there is a lack of a uniform definition of the environment, which makes it difficult for many international environmental law principles to apply to outer space. Second, the lack of a dedicated and binding instrument recognising space debris as an environmental pollutant and fixing State liability makes it difficult to assign debris cleaning duties to the pollutant State.

The Way Forward

The Inmarsat Space Sustainability Report 2022 identifies a need for more technical strategies and regulatory mechanisms to clean the LEO of stray satellites and the debris they create. Need for more accurate data on space contaminants is very essential for taking any measure. The inaccuracy of data is primarily due to the absence of internationally agreed-upon standards to define and characterise space contaminants. It is of utmost importance to start with regulating space exploitation with an attempt to mandate orbit cleansing obligations on the launching State. Launching States should be held responsible for the non-returning satellites, requiring them to record reasons for such orbit defiance. Additionally, the launching States should be obliged to take steps in locating the stray satellite, confining them, and ensuring their return or safe disposal without creating debris, either in space or upon its entry into the upper atmosphere. International treaties should restrict

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deliberate and unplanned destructions of defunct satellites by States. State liability in such cases should be the same as that provided for environmental pollution with the knowledge of the polluting State. Additionally, setting an upper limit on the number of satellites that a country could launch in a year would check and balance monopolisation attempts by government and private satellite operators. It is very crucial to monitor the commercialisation of space operations. A communal exploratory system will help reduce the number of unnecessary trips and would help minimise space debris creation and the probability of damage by the debris.

It is very important for States to agree upon a clear and unambiguous definition of 'environment'. It is suggested that States may include LEO within the definition of environment and regulate space debris pollution within LEO as environmental pollution. This will encourage the application of customary principles of international environmental law and ensure stricter State liability. There is also a need for recognising outer space as a common heritage of mankind and an extended application of the "common heritage" principle to regulate outer space pollution. Overall, the theoretical and legal frameworks need to be revised in order to reduce the impact of space debris in the LEO, outer space and the Earth's surface.

Conclusion

It is pertinent for countries to realise that there is a valid concern for the long-term usability and sustainability of Earth's orbits, the Lower Earth Orbit being at the highest risk. The environment cannot be understood as exclusive of space, thus, making it pivotal for the exploration and exploitation of space to be regulated. Space sustainability is a goal that should be rendered important just as environmental sustainability sincespace pollution is capable of catalysing climate change and inducing health hazards for the existing and future generations.

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OUTLINING INCONSISTENCIES IN THE INDIAN SPACE POLICY 2023

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Keywords: Authorisation – IN-SPACe – Liability – Non-appropriation – Space resource

The Indian government made a new beginning in 2020 with respect to the commercialisation of the space sector in India. The gates were opened for private sector participation in all aspects of space activities by the Government of India (GoI). This is a departure from the earlier scenario of allowing private sector participation only in the manufacturing segment related to space but not in the space services sector. Such a move was found essential for boosting the Indian economy, which was hit hard by the COVID-19 pandemic. Indian National Space Promotion and Authorization Centre (IN-SPACe) was also hurriedly established by GoI in June 2022 for licensing private space activities. This is further followed by the Indian Space Policy 2023 (2023 Policy), which clearly unveils the intention of GoI to extensively commercialise and privatise space activities in India. While the 2023 Policy has been hailed as futuristic and a welcome step during the last couple of days after it has been unveiled, its implementation in the absence of a national space law in India is on shaky grounds. In addition, some provisions of the 2023 Policy also raise suspicion regarding their compatibility with international treaty obligations of India.

Essence of the 2023 Policy

The key aspect of the 2023 Policy is reflected in its vision statement, which advocates for a flourishing commercial presence in space. In order to achieve this, the 2023 Policy attempts to encourage greater private sector participation in space activities by promising a stable and predictable regulatory framework. IN-SPACe is showcased as a single window for all aspects of authorisation for space activities. The 2023 Policy attempts to provide clearly defined roles for different agencies relating to space activities in India. The Department of Space is entrusted with the overall responsibilities to implement the 2023 Policy, interpret and clarify ambiguities in the 2023 Policy, distribute the responsibilities under the 2023 Policy,

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coordinate international cooperation, create a suitable space dispute settlement mechanism etc.

The Indian Space Research Organisation (ISRO) has been pushed back to doing its original function of research and development of new technologies and applications. As a futuristic goal, the 2023 Policy requires ISRO to develop technology and infrastructure for human space flight, resource exploitation and human presence in space, including habitation. ISRO's mandate is not just confined to developing new technologies but also extends to sharing them with both government and private entities. Thus, ISRO's role is more of a facilitator and the private sector is encouraged to take up the domain of commercial space activities. NewSpace India Limited (NSIL) is mentioned as the primary agency for the commercialisation of space technology and platforms of ISRO. However, the 2023 Policy is silent on the role of Antrix Corporation Limited (Antrix), which was established much before as a commercial wing of ISRO in 1992. It hints, though in unclear terms, the GoI's attempt to bury Antrix consequent to the disastrous Antrix-Devas saga, and showcase NSIL as the new commercial wing of ISRO.

Legislative Void

The 2023 Policy is stipulated as a document to promote private sector participation in space activities by different means including providing for regulatory certainty. While some aspects of promoting private space activities are within the domain of the executive, the most significant aspect of providing a legal regulatory framework is within the domain of the legislature. Permitting any private space activity in India should be preceded by legislative backing. Authorisation and continued supervision of space activities are treaty mandated obligations of India. Failure to discharge these obligations attracts the burden of State responsibility under Article VI of the Outer Space Treaty 1967. We can implement the process of authorisation and continued supervision of private space activities in a correct way only by specific adoption, which the legislature is competent to do under Article 253 of the Constitution of India. There is a long list of cases in India wherein executive actions beyond the legislative framework were struck down by the judiciary on the basis of the doctrine of ultra vires. The 2023 Policy carries the risk of flatly falling under this category of cases.

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The establishment of IN-SPACe as a body to authorise private space activities in India and granting all powers to it for framing guidelines and regulations to govern are not based on any sound legal premise. The function of promoting space activities, which is entrusted with IN-SPACe, is within the policy domain of the executive. However, granting authorisation to private players and conferring power to frame guidelines and regulations are the essential functions of the legislature. This is why all other States in the world have passed domestic laws before establishing a body for granting licenses to private players in the space sector. Under the 2023 Policy, even the determination of the most significant aspect of fixation of liability for damage caused due to space activities is left to the guidelines to be formulated by IN-SPACe, which is not permissible. Hence, the 2023 Policy is not providing much needed stable legal regulatory framework for the private sector in the absence of a Parliament enacted law.

Compatibility with International Treaty Obligations?

In addition to the concerns posed by the absence of a Parliament enacted law, certain provisions of the 2023 Policy are dubious on the aspect of their compatibility with Indian obligations under the United Nations (UN) space treaties. The vision statement of the 2023 Policy reflects only the national economic interest as against the common interest of all. This is a marked departure from our own assertion under Article I of the Outer Space Treaty to carry on the space activities "for the benefit and interest of all countries".

A much greater concern is found in the form of following the footsteps of the United States in terms of exploiting resources available in outer space. Clause 4, Sub-clause 14 of the 2023 Policy stipulates that the non-governmental entities would be encouraged to "engage in the commercial recovery of an asteroid resource or a space resource." It goes on to copy Section 51303 of the US Commercial Space Launch Competitiveness Act 2015 for conferring property right over such resources to private entities without any application of mind. The United States approach has been an individualistic approach towards the exploitation of space resources, which has been followed by Luxembourg, the United Arab Emirates and Japan. Such an individualistic approach is against the collective rights approach under the space law, which is strongly rooted in the UN Space treaties.

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Apart from an individualistic approach towards resource exploitation, the 2023 Policy also makes a reference to extra-terrestrial habitation. While outlining the functions of ISRO, Clause 6, Sub-clause 7 of the 2023 Policy mandates ISRO to carry forward this dream through research and innovation. This also brings forward the questions relating to land property rights on celestial bodies, which will be unavoidable after having human settlements. However, it needs to be kept in mind that asserting private claims over space resources is not just against the respect for the principle of common benefit and interest but also contrary to the well-established principle of national non-appropriation under Article II of the Outer Space Treaty. The absurd argument that a prohibition on national appropriation does not cover a ban on individual appropriation is the basis for ostensible private property claims over space resources. Allowing or promoting the assertion of private property rights in space will also be a major reason for space resource/land grab and future conflicts. Hence, any aspect relating to property rights in space should be left to international negotiation rather than addressing it under national laws, much less as a part of a policy document.

Incidental Issues

There are also some other aspects of the 2023 Policy, which need proper attention. First among them is the definition of 'space object' provided under the 2023 Policy, which mentions that 'any constituent element' of space object is also included. However, if we look into the provisions of the Liability Convention 1972 or the Registration Convention 1975, the definition of space objects stipulates 'component parts' and not 'constituent elements' of space objects. In addition, the 2023 Policy also mentions that any other object may also be notified as a 'space object' from time to time. Thus, there is a lot of confusion surrounding the meaning of 'space object', which is not ideal as there are different implications of it under the UN space treaties regarding registration, liability, and recovery and return of space objects.

In terms of applicability and implementation, Clause 9 of the 2023 Policy stipulates the coverage of space activity "to or from Indian territory or within the jurisdiction of India including the area to the limit of its exclusive economic zone". This clause is oriented only towards territorial jurisdiction, and thereby, the subject matter and personal jurisdiction aspects covered under the UN space treaties are found missing

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under the 2023 Policy. Added to this, blanket power is granted to GoI to exempt the application of any provision of the 2023 Policy on a case to case basis. Such a self-conferred unbridled power of the executive is neither on any sound legal basis nor conducive for a healthy development of space sector in India. Hence, we need to rethink on the 2023 Policy to ensure that the respective domains of international space law and the Indian legislature are not usurped by the policy excesses.

Notes & References

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GO FIRST INSOLVENCY: EXPLOITING THE LACUNA IN THE AIRCRAFT RULES 1937

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Keywords: Aircraft Repossession – Bankruptcy Code – Cape Town Convention – DGCA – IDERA

The outlook for commercial aviation in India had been buzzing with optimism. After the mismanagement and irregularities that ultimately led to the ongoing insolvency of Jet Airways, Air India's much publicized mammoth order of 840 aircraft (comprising of 470 firm orders and 370 options and purchase rights, split between manufacturing giants Boeing and Airbus) had given legitimate cause for a shift in the mood of the commercial aviation sector in India. Adding to this were press reports claiming a similar sized order from Indigo being negotiated, along with a three-digit order from nascent entrant Akasa Air.

However, ever since the admission of Go Airlines (India) Ltd.'s ("Go First") recent petition seeking voluntary initiation of the corporate insolvency resolution process before the National Company Law Tribunal (NCLT), New Delhi, [now also upheld by an order of the National Company Law Appellate Tribunal (NCLAT), New Delhi] it is safe to say that the momentum that the sector was experiencing has not only been halted but reversed. Stakeholders across the sector have been left embittered, and none more than Go First's aircraft lessors.

A common misconception among those outside the aviation sector is that commercial airlines own all of the aircraft that they operate. Rather, the fleet of most commercial airlines consists of a blend (in varying ratios) of owned and leased aircraft. The essence of aircraft leasing is not dissimilar from the leasing of other capital-intensive assets insomuch that it simply involves the leasing of an asset (in this case, aircraft) by a lessor to a lessee for a fixed and limited duration of time in exchange for periodical rental payments. Go First has a fleet of 59 aircraft, the majority of which are leased rather than owned.

The relevant pieces of international law that govern the facilitating of efficient leasing of aircraft arethe Convention on International Interests in Mobile Equipment ("the Cape Town Convention") and the Protocol to the Convention on

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Matters Specific to Aircraft Equipment ("the Cape Town Protocol"). The Cape Town Convention and the Cape Town Protocol were created with the intention of *inter alia*reducing creditor risk, doing so by providing speedy remedies for repossession of aircraft by aircraft lessors from aircraft lessees that may be exercised upon the occurrence of certain trigger events as may be set out in the aircraft lease agreement, such as insolvency of the aircraft lessee. Specifically, this is done by providing for a mechanism by which aircraft lessors can repossess the aircraft unilaterally, through a primary document called an Irrevocable Deregistration and Export Request Authorisation (IDERA); the relevant provision that empowers aircraft lessors with this mechanism is Article XIII of the Cape Town Protocol. This, among other provisions of the Cape Town Convention and the Cape Town Protocol all have the effect of reducing lessor risk, which in turn reduces the cost of aircraft leasing in the form of lower premiums on lease rentals. It then reduces the lessee's cost of operation, ultimately resulting in a trickle-down effect on ticket prices, benefiting the consumer.

Despite having acceded to the Cape Town Convention and the Cape Town Protocol in 2008, India is yet to formally adopt this international treaty into its domestic law framework. Given that India follows a policy of dualism with regard to its obligations under international law, the Cape Town Convention and the Cape Town Protocol are not recognised by Indian Courts as binding domestic law. It is pertinent to note here that the *Lok Sabha* even introduced the Cape Town Convention Bill, 2018 ("the 2018 Bill") to implement the Cape Town Convention and the Cape Town Protocol as domestic law, but this has since seen minimal progress towards being passed as a central act. As a result, aircraft lessors leasing aircraft into India are unable to exercise the various provisions of the Cape Town Convention and the Cape Town Protocol that exist for the protection of their interests. Instead, aircraft lessors are forced to rely on domestic laws such as the Aircraft Rules, 1937 ("the Rules"). Amendments in 2016 incorporated (albeit to a limited extent) the abovementioned Article XIII of the Cape Town Protocol into the newly created Rule 30(7) of the Rules. However, these amendments have been proved to be largely ineffective in helping to alleviate the high level of risk involved in the leasing of capital-intensive aircraft.

Shortly after the Rules were amended as explained above, the Insolvency & Bankruptcy Code, 2016 ("the IBC") was enacted. This latter piece of legislation came with a non-obstante clause, embodied in its Section 238, which has had the effect of

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negating the pro-lessor provisions of the Rules. This will be pragmatically explained using Go First's abovementioned recent voluntary initiation of the corporate insolvency resolution process.

The regulatory body in India that is empowered to act on an IDERA and facilitate the repossession of an aircraft from an aircraft lessee to an aircraft lessor is the Directorate General of Civil Aviation (DGCA), which is under the control of the Ministry of Civil Aviation (Government of India). While Rule 30(7) of the Rules calls upon the DGCA to cancel the registration of an aircraft (thereby beginning the process of repossession of the aircraft) within 5 working days of receipt of an application in the prescribed form from the IDERA holder (aircraft lessor), this stipulated time limit is empirically not considered to commence from the date of actual receipt of such application, but from the time of affirmation by the DGCA of such application being in order (at which point the DGCA publishes the same on its website). In the case of Go First's petition for voluntary initiation of the CIRP, the NCLT, acting on its 14-day time limit as stipulated in Section 10(4) of the IBC, admitted the same in just 8 days (the petition was filed on 2 May 2023 and admitted on 10 May 2023), before which the DGCA (taking advantage of the flexible time limit) failed to cancel the registration of any of Go First's leased aircraft despite the fact that several such applications were published by the DGCA on its website prior to admission of the petition(in some cases, even more than 5 days before admission of the petition). Upon admission of the petition, moratorium under Section 14 of the IBC was triggered, *inter alia* prohibiting "the recovery of any property by an owner or lessor where such property is occupied or in the possession of the corporate debtor", that is, Go First. It is noteworthy here that in the only other example of insolvency proceedings qua an Indian airline (the ongoing insolvency of Jet Airways), the period of moratorium, which commenced on 20 June 2019, has well exceeded the stipulated period of 330 days under Section 12 of the IBC. To this day, such moratorium continues, seeming indefinite. Consequently, aircraft lessors are left with their recourse for repossession of aircraft under the rules being completely negated by virtue of the IBC.

Go First's Chief Executive Officer, Kaushik Khona, has openly stated to the press that "the airline filing an insolvency petition with the National Company Law Tribunal (NCLT) is not a ruse to get loan write offs but mainly to safeguard/ retain the aircrafts so that the lessors do not repose them", this quote even being

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reproduced in paragraph 29 of the abovementioned NCLAT order. Clearly, Go First has found a way to weaponize the IBC, using it as a tool to hold on to leased aircraft that do not belong to them. This has left aircraft lessors with an extremely sceptical outlook towards future aircraft leasing into India. This impression has already been reflected in India's Cape Town Convention Compliance Index score, which is an internationally recognized rating on a scale of 100 that monitors and assesses compliance by contracting states to the Cape Town Convention and the Cape Town Protocol.

The Government of India has exposed itself to heavy criticism from the global aviation community for its laissez-faire attitude towards Go First's ongoing corporate insolvency resolution process. Not only has the Government of India failed to adequately respond to the situation, but it has also failed to conclusively pre-empt it. It is crucial to note here that the *Lok Sabha* even went as far as introducing the Protection and Enforcement of Interests in Aircraft Objects Bill, 2022 ("the 2022 Bill"), Section 19 of which actually takes cognisance of the possibility of aircraft lessees weaponizing the IBC to hold on to leased aircraft. Accordingly, the said Section 19 of the Bill carves out an exemption from Section 14 of the IBC for leased aircraft, allowing for leased aircraft to be repossessed by the aircraft lessor (creditor) within no later than 2 calendar months of the commencement of insolvency proceedings against the aircraft lessee (corporate debtor), subject to certain conditions being met. However, this too, like the 2018 Bill, has seen minimal progress towards being passed as a central law. With the proposed expansions of Air India, Indigo and Akasa Air, it is imperative for the Government of India to step in and restore lessor confidence in the commercial aviation sector of India either by giving teeth to the Rules and ensuring that it overrides the provisions of the IBC, or by expediting the enactment of the 2018 Bill and the 2022 Bill so as to disarm aircraft lessees from taking undue advantage of this substantial lacuna in the law.

Notes & References:

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